University of Mumbai

Examination 2020 under cluster ___ (Lead College Shortname)

Program: EXTC Engineering
Curriculum Scheme: Rev2016
Examination: Second Year Semester-IV
Course Code: ECC402 and
Course Name: E.D.C-II

Time: 1 hour Max. Marks: 50

For the students:- All the Questions are compulsory and carry equal marks .

Q1.	**The enhancement type of MOSFET works only with _____.**
Option A:	**large positive gate voltage**
Option B:	**large negative gate voltage**
Option C:	**large positive drain voltage**
Option D:	**large negative drain voltage**
Q2.	**The _____ type of MOSFET with the inbuilt channel between the drain and the source terminals has drain current even with the application of zero gate to source voltage**
Option A:	Depletion MOSFET
Option B:	Enhancement MOSFET
Option C:	Depletion-Enhancement MOSFET
Option D:	None of the above
Q3.	The drain current of DMOSFET _____ as negative Vgs is increased
Option A:	Increases
Option B:	Decreases
Option C:	Not effected
Option D:	Saturates
Q4.	The Q point Should lie in the _____ region for MOSFET to operate as an amplifier
Option A:	Ohmic
Option B:	Cut off
Option C:	Saturation
Option D:	Ohmic and saturation
Q5.	MOSFET biasing circuit should adjust the Q point in the _____ region for operating it as a switch.
Option A:	Saturation
Option B:	Ohmic
Option C:	Cut off
Option D:	Avalanche
Q6.	_____biasing circuit is used for the enhancement type of MOSFET
Option A:	Feedback
Option B:	Self
Option C:	Fixed
Option D:	None of the above

Q7.	RC coupling is used for _____ amplification
Option A:	Voltage
Option B:	current
Option C:	power
Option D:	None of the above
Q8.	Direct coupling in two stage cascade amplifier
Option A:	Effect the Q point of second stage
Option B:	Does not change the Q point of second stage
Option C:	Uses capacitors for coupling
Option D:	Blocks dc from first stage
Q9.	The input impedance of the Darlington pair is
Option A:	Extremely low
Option B:	Extremely high
Option C:	medium
Option D:	Floating
Q10.	Following is an hybrid amplifier
Option A:	CE-CE
Option B:	CS-CS
Option C:	CS-CE
Option D:	All of the above
Q11.	Cascode amplifer is
Option A:	CS-CS
Option B:	CE-CE
Option C:	CB-CB
Option D:	CE-CB
Q12.	Cascode amplifier provides
Option A:	Low input impedance and low voltage gain
Option B:	Low input impedance and high voltage gain
Option C:	High input impedance and low voltage gain
Option D:	High input impedance and high voltage gain
Q13.	Transformer coupling blocks
Option A:	DC signal
Option B:	AC signal
Option C:	DC and AC signal
Option D:	None of the above
Q14.	The overall voltage gain of a cascaded multistage amplifier is equal to
Option A:	The addition of the individual voltage gains
Option B:	The product of the individual voltage gains
Option C:	Subtraction of the second stage from first stage
Option D:	Subtraction of the first stage from the second one

Q15.	RC coupling amplifier is used for the
Option A:	Resonant amplifiers
Option B:	Radio frequency amplifier
Option C:	Audio frequency amplifier
Option D:	GHz frequency amplifier
Q16.	The higher cut off frequency of a multistage amplifier using BJT depends
Option A:	Coupling capacitors
Option B:	Stray capacitance between the base and the collector
Option C:	Bypass capacitors
Option D:	None of the above
Q17.	The maximum efficiency of transformer coupled Class A amplifier is
Option A:	90%
Option B:	50%
Option C:	75%
Option D:	100%
Q18.	Transformer coupled Class A amplifier is useful
Option A:	High impedance loads
Option B:	Low impedance loads
Option C:	Floating loads
Option D:	Infinite load
Q19.	The transistor is biased at _____ in class B amplifier
Option A:	Saturation region
Option B:	Active region
Option C:	Cut off region
Option D:	Ohmic region
Q20.	Heat sink is required in power transistor to
Option A:	Radiate heat produced
Option B:	absorb heat produced
Option C:	Provide electrical connection
Option D:	None of the above
Q21.	Voltage shunt is a type of _____feedback amplifier
Option A:	Series series
Option B:	Series shunt
Option C:	Shunt –shunt
Option D:	Shunt series
Q22.	Oscillator uses
Option A:	Positive feedback
Option B:	Negative feedback
Option C:	External ac input
Option D:	None of the above

Q23.	For a feedback factor of value 1/3 in wien bridge oscillator, the gain of the amplifier should be atleast equal to _____ for sustained oscillations.
Option A:	2
Option B:	3
Option C:	1
Option D:	2.5
Q24.	Crystal oscillator provides
Option A:	Highly stable frequency
Option B:	Unstable frequency
Option C:	Variable frequency
Option D:	Very small frequencies
Q25.	Colpitt's oscillator is an
Option A:	RC oscillator
Option B:	Crystal oscillator
Option C:	LC oscillator
Option D:	None of the above